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DISASTER PREPAREDNESS: ANTICIPATING THE WORST CASE SCENARIO

U.S. Pacific Command South Asia Seismic Disaster Preparedness Conference
February 22-24 2005, Honolulu Hawaii

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> ***"Volcanic arcs and oceanic trenches partly encircling the Pacific Basin form the so-called Ring of Fire, a zone of frequent earthquakes and volcanic eruptions."***
> -- http://pubs.usgs.gov/publications/text/fire.html

South Asia, geologically speaking, is a very dynamic region. Its northern boundaries follow the convergence of the Indian and Eurasian Plates, while its southern edge is contained within the Ring of Fire. Although the major collision of continents that began the formation of the Himalayas and the Tibetan Plateau occurred 50 million years ago, South Asia is still a seismically active area. Over the last century it has experienced eighteen earthquakes with a magnitude greater than 6.0. Approximately every 70 years the Kathmandu Valley in Nepal experiences such a seismic event. More immediately, it is estimated that 350,000 lives were lost and potentially millions left homeless in Bangladesh, India, Indonesia, Sri Lanka, and Thailand from the 9.0 earthquake and resulting tsunami that occurred off Indonesia on December 26, 2004. With recurring major earthquakes predicted for this seismically unstable region, effective disaster preparedness planning at the national and regional levels is a "high payoff" investment that governments can make in anticipation of large-scale natural or man-made disasters. Such preparedness planning both speeds the national and regional reaction time, and assists international organizations and other countries in sizing appropriate response support.

The December 2004 Tsunami, triggered by a magnitude 9.0 earthquake, wiped out the east and west coasts of Aceh and part of northern Sumatra.

IDENTIFYING REGIONAL PREPAREDNESS REQUIREMENTS

In order to gauge the status of disaster preparedness planning in South Asia and to facilitate the sharing of best practices, the United States Pacific Command (USPACOM), the United States Army Pacific (USARPAC), the Center of Excellence in Disaster Management & Humanitarian Assistance (COE), and the Office of the Deputy Undersecretary of Defense (Installations & Environment) hosted the South Asia Seismic Disaster Preparedness Conference in Honolulu, Hawaii, on February 22-24, 2005. Co-sponsors included the United States Embassy Kathmandu, the United States Central Command, and the United States Army War College Center for Strategic Leadership. The conference focused on identifying opportunities for regional information sharing and regional

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planning while enhancing linkages between the scientific communities, government, and defense sectors in monitoring, preparing for, and responding to seismic events.

The detailed planning and final coordination for this conference had been underway for over one year when the earthquake-generated tsunami struck the nations of the Indian Ocean. This event and the resulting national, regional, and international response efforts energized the nations of South Asia to take a serious look at their disaster preparedness planning processes and the critical gaps exposed by the magnitude of this disaster. The South Asia Seismic Disaster Preparedness Conference offered participating nations an opportunity to share ideas and take the first steps toward regional cooperation in responding to natural catastrophes as well as man-made disasters and terrorist incidents.

Brigadier Devadoss, India (left) and MG Bambang, Indonesia, discuss Tsunami response in the Andaman and Nicobar Islands and Banda Aceh, respectively.

CONFERENCE METHODOLOGY

Conference attendees included military and civilian disaster management planners from Bangladesh, Bhutan, China, India, Indonesia, the Maldives, Nepal, Pakistan, Sri Lanka, and the United States. They shared their processes and experiences, and openly expressed their needs with subject matter experts from the U.S. Geological Survey (USGS), the National Weather Service's Pacific Tsunami Warning Center, the U.S. Army Corps of Engineers, and the U.S. Agency for International Development's (USAID) Office of Foreign Disaster Assistance (OFDA), who provided insights on available planning, warning, and recovery technology and assistance. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) discussed its role in mobilizing and coordinating effective humanitarian action in partnership with national and international humanitarian actors, and on the workings of the International Search and Rescue Advisory Group (INSARAG). A representative from Turkish General Staff provided an excellent review of the operations of the Turkish Armed Forces (TAF) in response to the 1999 earthquakes in Anatolia. This presentation, which described the post-earthquake actions taken by the TAF to reorganize their available assets to better address future response requirements, made a sobering impression. Most attendees saw the TAF's experience as a viable option, given the absence of national resources available to add capabilities.

USPACOM South Asia Seismic Disaster Preparedness Conference Participants

In response to requests for strategic planning and disaster preparation assistance, the hosting Combatant Commands, USPACOM and USCENTCOM, provided overviews of the programs available in their respective area of responsibility (AOR). The USPACOM reviewed their Disaster Relief Response Process and the critical

role of effective civil-military coordination. Under this theme they also discussed the supporting relationship of the combatant commands to OFDA, the role of the Multinational Planning Augmentation Teams (MPAT), and the key coordination role of their full-spectrum Joint Interagency Coordination Group (JIACG). The USCENTCOM presented its Disaster Preparedness Program, a proactive effort that integrates combating terrorism and Theater Security Cooperation objectives. It supports the removal of the root causes of terrorism through Humanitarian Assistance, Disaster Response and Humanitarian Mine Action Programs, while improving USCENTCOM coalition partners' national and regional operational capabilities to prevent, prepare for, respond to, and/or mitigate the effects of intentional or accidental man-made incidents and natural disasters.

MG Chang Shengrong, China, discusses regional disaster preparedness capabilities.

WORKING TOGETHER

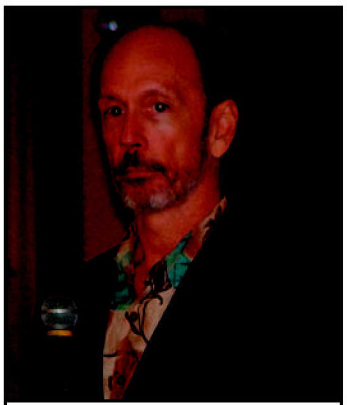
There is no way of lessening the scope of the humanitarian crises caused by the December 2004 tsunami but, on a geopolitical level, key relationships were restructured during the immediate response period that will strengthen long-term recovery efforts. Throughout the conference the national representatives worked together positively on both a professional and social level. Their Informative and detailed presentations talked to the potential for Lessons Learned in coordinating national, regional, and international response efforts, and were followed by unusually open and frank discussions of shared challenges.

MILITARY SUPPORT TO CIVILIAN AUTHORITIES

A common thread through all presentations was the criticality of unique military capabilities in responding to terrorist events or natural disasters. In most cases the tsunami destroyed local communications infrastructure which, in some cases, meant that national governments received their initial information regarding the magnitude of the disaster from international news organizations. The rapid dispatch of military units to the disaster sites with their portable communications capabilities was essential for two reasons. First, it reestablished the flow of information so critical for effective response coordination; and, second, it allowed the dissemination of public information necessary to counter the many rumors born in the confusion and uncertainty of such an event.

Since major seismic events sever the surface lines of communications into the most damaged areas, the military's helicopters and intratheater airlift, such as C-130 aircraft, are essential elements of any national preparedness plan. Following the tsunami these critical assets were unavailable to support the response to some of the hardest hit areas due to economic embargoes imposed by the United States and other Western nations that prevented the purchase of the necessary repair parts to maintain the flight readiness of the aircraft.

"THE WAY AHEAD"



Dr. Kent Butts, U.S. Army War College, leads "The Way Ahead" discussion.

As mentioned above, disaster preparedness planning is essential at a national-level to ensure a timely and effective response and/or to mitigate the effects of intentional or accidental man-made incidents and natural disasters. However, since the impacts of such major events are usually transnational, they also require collaborative regional solutions. To address this challenge, participants identified areas for cooperation that could reinforce current capabilities. Data sharing, identification of available regional resources, increasing awareness of vulnerabilities and dangers, and skills development were recognized as disaster preparedness enablers. Opportunities to improve capabilities in these areas include: participation in disaster preparedness-themed joint and multinational exercises; thorough disaster response-focused technology exchanges such as mapping assistance; development of a regional web site for sharing critical disaster preparedness and response information; and cooperation with the U. S. Combatant Commands to improve their planning processes.

At the conclusion of the conference attendees agreed on the importance of conducting a follow-on Disaster Preparedness Workshop within the next year at an actual threat site. This meeting would focus on development of common methodologies, terminologies, and standard operating procedures (SOPs) for regional civil-military disaster preparedness using the four recognized pillars of disaster management – prevention, mitigation, preparedness, and response – as the framework.

CONCLUSION

Successful disaster management has common characteristics. First, there are existing disaster preparedness organizations with planning and coordination capabilities connecting from the national-level upwards to the international community, and downwards to the regional and local levels. Second, these organizations operate under focused civilian leadership that employs a pre-planned and executable information collection and dissemination plan (media and emergency); and finally, there is effective and coordinated use of available resources to include capitalizing on military support capabilities. The criticality of such an in-place disaster management system was demonstrated in the immediate aftermath of the September 11, 2001 terrorist attack on the World Trade Center by the City of New York's Emergency Management infrastructure. Its coordination of national, state, and local-level response efforts materially mitigated the overall impact of this attempt to destabilize the U.S. Government.

Clockwise from top left, participants from Nepal, OCHA, Pakistan, and OFDA.

Such past experiences and the more recent seismic-driven events in South Asia demonstrate that disaster preparedness planning is a valuable tool in the U.S. Combatant Commander's Theater Security Cooperation Program. It strengthens regional stability by encouraging cooperation in a non-threatening environment with results that are beneficial to all participants. Although commonly associated with natural disaster response, the control and coordination procedures and the framework for information sharing are applicable when responding to the effects of intentional or accidental man-made disasters.

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